

## District Evaluations

Pursuant to Arizona law [ARS 15-241(DD)] the Arizona Department of Education has developed and published performance evaluations of districts and charter holders. This document describes components of the evaluation.

### Overview

The district evaluations are composed of the elements listed below specified by law. The evaluation ranks districts and charter holders on a point scale that ranges from zero at the lowest end to an unlimited number at the high end. However, practically, the scale ranges from zero to 100. The scale is not divided into performance categories that identify schools as “underperforming,” “performing,” etc.

- 1. Measures of Academic Progress.** This is a value-added or growth analysis that looks at individual student improvement over time. The measures included in the evaluation examine student growth from grades three through eight, and from grade eight to high school. The points a district may earn from this component are unlimited, but the practical maximum is **48**.
- 2. Pupil Assessment Data.** This measure looks at the aggregate percentage of students passing the AIMS exam, and the improvement shown by the district or charter holder in the percent passing AIMS. A district/charter holder may earn up to **36** points from this component.
- 3. Attendance and Graduation Rates.** Districts/charter holders that award high school diplomas are evaluated based on their graduation rate. Entities that do not award diplomas (e.g. elementary districts) are evaluated based on their attendance rate. A district/charter holder may earn up to **1** point from this component.
- 4. The percentage of parents that consider the quality of their child's education as excellent.** This measure is based on the results of parent satisfaction surveys administered by districts/charter holders. A district/charter holder may earn up to **15** points from this component.

## Measure of Academic Progress

A modified measure of academic progress (MAP) is used for evaluating district/charter holder performance. Like the MAP used for school AZ LEARNS, the MAP for districts/charter holders evaluates performance based on the difference between actual and expected growth for individual students.

However, the district MAP has several differences compared with school MAP. First, the dependent variable is current year scale score not growth from previous year to current year. This modification provides a slightly better fit to the data. Second, student program membership—English language learner and special education—and socio-economic status are included as independent variables. Finally, a MAP is calculated for high school grades.

The equation to calculate expected growth is:

$$Scalscor_{it} = \beta_1 + \beta_2 Scalscor_{it-1} + \beta_3 FAY_{it} + \beta_4 SES_{it} + \beta_5 SPED_{it} + \beta_6 ELL_{it} + \beta_7 Year_t + \varepsilon_{it} \quad (A)$$

where

$Scalscor_{it}$  = student's scale score at time t;

$FAY_{it}$  = 1 if the student was continuously enrolled in the district during year t; and = 0 if not.

$SES_{it}$  = 1 if the student comes from a low-income family, as measured by eligibility for a free or reduced school lunch;

$SPED_{it}$  = 1 if the student received special education services;

$ELL_{it}$  = 1 if the student was an English language learner;

$Year_t$  indicates the year of the data: 2006 or 2007. This is to control for any cohort effects.

The above equation is estimated using regression analysis by grade (four through eight) and subject (reading and math) for AIMS results from 2005 through 2007. The resulting estimates are used to calculate an expected score for the student  $Pred_{it}$

$$Pred_{it} = \hat{\beta}_1 + \hat{\beta}_2 Scalscor_{it-1} + \hat{\beta}_3 FAY_{it} + \hat{\beta}_4 SES_{it} + \hat{\beta}_5 SPED_{it} + \hat{\beta}_6 ELL_{it} + \hat{\beta}_7 Year_t$$

The difference between the predicted value and the actual score is calculated and divided by the standard error of the residual to get the performance index:  $PI_{it}$

$$PI_{it} = \frac{Scalscor_{it} - Pred_{it}}{s}$$

For high schools, the procedure described above is followed except that  $Scalscor_{it}$  is the student's score on the 10<sup>th</sup> grade AIMS, and  $Scalscor_{it-1}$  is the student's score on the 8<sup>th</sup> grade AIMS.

The performance indices are summed across all students, grades, and subjects to arrive at a district performance index for the elementary grades:  $PI_{Dist}$ . The number of points awarded to the district is calculated as

$$Points\ Awarded = 25 + 33 \times PI_{Dist}.$$

**Pupil Assessment Data.** The calculation of this component follows the method, business rules, and parameters used for the status/growth portion of the school AZ LEARNS profiles, with two exceptions. First, the points awarded for status and growth are added for each grade and subject with equal weight instead of the 70/30 percent weights used for the school profiles. For example, if for a single grade and subject a district earned 5 status points and 3 growth points, the total number of points earned would be 8, not 4.4 as it would be following the school methodology. Second, AIMS-A results are included in the evaluation.

The method and parameters applied conform to policy approved by the State Board through March 2008.

Please refer to the AZ LEARNS technical manual for details regarding the school calculation.

**Attendance and Graduation Rates.** Districts/charter holders who grant diplomas earn one point if their five-year graduate rate is greater than 70 percent, or if their five-year graduation rate has grown by 1 percentage point from the previous year.

Districts/charter holders that do not grant diplomas earn one point if their attendance rate is 90 percent, or if their attendance rate has grown by 1 percentage point from the previous year. The attendance rate used is the same attendance rate, based on 100-day average daily attendance and average daily membership used for the adequate yearly progress (AYP) evaluations for districts/charter holders. Please refer to the AYP technical manual for details.

**Parental Satisfaction.** For this part of the evaluation, districts/charter holders were asked to administer the following question to the parents of their students:

**The quality of my child's education at his/her school is:**

**Excellent      Good      Fair      Poor**

Alternatively, districts/charter holders were allowed to submit the results of a similar question on a survey that they already give to their parents.

Districts/charter holders were awarded points based on the following formula:

$$\textit{Points Awarded} = 15 \times (\textit{Percent of answers indicating excellent}).$$

For example, if 20 percent of parents answered that they considered their child's education excellent, the district would receive  $15 \times .20 = 3$  points.